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Application No. 10/069,954
Response dated June 3, 2004
Reply to Office Action of March 16, 2004

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-8 (canceled)

¹
Claim ~~9~~ (currently amended): A method of detecting and removing a shell residue left in a shellfish flesh portion, comprising:

irradiating a light having a peak wavelength from 254nm to 400nm directly onto a shellfish flesh portion after finishing a shell-stripping work, wherein the light makes ~~thereby emitting~~ a fluorescent light emit more from the shell residue than from the shellfish flesh portion;

detecting the fluorescent light emitted from the shell residue; and
^{the shellfish with}
removing ~~the shell residue~~ ^{from further processing.}

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²
Claim ~~10~~ (currently amended): A method of detecting and removing a shell residue left in a shellfish flesh portion according to claim ~~9~~, wherein the fluorescent light emitted from the shellfish flesh portion is detected by ~~taking an image of the shellfish flesh portion with~~ a CCD camera.

³
Claim ~~11~~ (currently amended): A method of detecting and removing a shell residue left in a shellfish flesh portion according to claim ¹~~9~~, wherein the shellfish flesh portion comes from shrimp, and wherein the irradiated light has a peak wavelength of not more than 254nm ~~[[400nm]]~~.

⁴
Claim ~~12~~ (currently amended): A method of detecting and removing a shell residue left in a shellfish flesh portion according to claim ¹~~9~~, wherein the shellfish flesh portion comes from crab, and wherein the irradiated light has a peak wavelength of not more than 400nm.

⁵
Claim ~~13~~ (currently amended) A method of detecting and removing a shell residue left in a shellfish flesh portion according to claim ¹~~9~~, wherein the irradiated light is an excitation light.

⁶
Claim ~~14~~ (previously presented) A method of detecting and removing a shell residue left in a shellfish flesh portion according to claim ¹~~9~~, wherein the fluorescent light is detected through a filter, and wherein the filter absorbs the irradiated light and passes the emitted fluorescent light.

⁷
Claim ~~15~~ (currently amended): An apparatus for detecting and removing a shell residue left in a shellfish flesh portion, comprising:

a light source provided for irradiating a light having a peak wavelength from 254nm to 400nm directly onto a shellfish flesh portion after finishing a shell-stripping work, wherein the irradiated light makes thereby emitting a fluorescent light emit more from the shell residue than from the shellfish flesh portion;

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a detecting means provided for detecting the fluorescent light emitted from the shell residue; and

a means provided for removing the shell residue ~~detected~~ ^{detected shellfish with the} ~~from further processing.~~

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⁸
Claim ~~16~~ (currently amended): An apparatus for detecting and removing a shell residue left in a shellfish flesh portion according to claim ~~16~~ ⁷, further comprising a CCD camera provided for detecting for taking an image of the shellfish flesh portion to detect the fluorescent light.

⁹
Claim ~~17~~ (currently amended): An apparatus for detecting and removing a shell residue left in a shellfish flesh portion according to claim ~~17~~ ⁷, further comprising a filter provided between the shellfish flesh portion and the detecting means, wherein the fluorescent light is detected through a filter, and wherein the filter absorbs the irradiated light and passes the emitted fluorescent light.